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Dated: June 20, 2006

Docket No.: BGI-126CPCN  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:  
Markus Pompejus *et al.*

Application No.: 10/781014

Confirmation No.: 2283

Filed: February 17, 2004

Art Unit: 1652

For: *CORYNEBACTERIUM GLUTAMICUM*  
GENES ENCODING PROTEINS INVOLVED  
IN CARBON METABOLISM AND ENERGY  
PRODUCTION

Examiner: C. L. Fronda

MS Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT (IDS)**

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO Form SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is filed more than three months after the U.S. filing date, and after the mailing date of the first Office Action on the merits, but before the mailing date of a Final Office Action or Notice of Allowance (37 CFR 1.97(c)).

For the Examiner's convenience in reviewing this continuation application, Applicants submit a consolidated PTO Form SB/08, listing all references cited during the prosecution of the parent application. Specifically, references A1, B1-B3 and C3-C20 were previously cited and submitted to the Office in U.S. Application Serial No. 09/602,740, filed June 23, 2000 (Atty. Docket No. BGI-126CP), of which this application is a continuation and to which this

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application claims priority. In accordance with 37 CFR §1.98(d), these references are not enclosed herewith, but will be provided upon request. In addition, this Information Disclosure Statement presents references C1-C2, not previously submitted to the Office, which are enclosed herewith in accordance with 37 CFR §1.97.

In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this Information Disclosure Statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.


It is submitted that the Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed references.

Please charge our Deposit Account No. 12-0080 in the amount of \$180.00 covering the fee set forth in 37 CFR 1.17(p). The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 12-0080, under Order No. BGI-126CPCN.

Dated: June 20, 2006

MLZ/MXG/mch

Respectfully submitted,

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PTO/SB/08a/b (07-05)

Approved for use through 07/31/2006. OMB 0651-0031

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|  |   |    |   | Application Number       | 10/781014-Conf. #2283 |
|  |   |    |   | Filing Date              | February 17, 2004     |
|  |   |    |   | First Named Inventor     | Markus POMPEJUS       |
|  |   |    |   | Art Unit                 | 1652                  |
|  |   |    |   | Examiner Name            | C. L. Fronda          |
| Sheet  | 1 | of | 2 | Attorney Docket Number   | BGI-126CPCN           |

| U.S. PATENT DOCUMENTS |                       |   |                                |  |   |
|-----------------------|-----------------------|---|--------------------------------|--|---|
| Examiner Initials*    | Cite No. <sup>1</sup> | Document Number<br>Number-Kind Code <sup>2</sup> (if known) | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines, Where<br>Relevant Passages or Relevant<br>Figures Appear |
|                       | A1*                   | 2002/0197605  | 12-26-2002                     | Nakagawa, Satoshi et al.                           |   |

| FOREIGN PATENT DOCUMENTS |                       |   |  |                                |   |   |   |
|--------------------------|-----------------------|---|--|--------------------------------|---|---|---|
| Examiner Initials*       | Cite No. <sup>1</sup> | Foreign Patent Document   |  | Publication Date<br>MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear | T |
|                          |                       | Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known) |  |                                |   |   |   |
|                          | B1                    | WO01/04322-A1   |  | 01-18-2001                     | Degussa-Hüls Aktiengesellschaft                 |   |   |
|                          | B2                    | WO01/04325-A1   |  | 01-18-2001                     | Degussa-Hüls Aktiengesellschaft                 |   |   |
|                          | B3                    | EP1108790-A2  |  | 06-20-2001                     | Kyowa Hakko Kogyo Co., Ltd.                     |   |   |

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

| NON PATENT LITERATURE DOCUMENTS |                       |   |                |
|---------------------------------|-----------------------|---|----------------|
| Examiner Initials               | Cite No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T <sup>2</sup> |
|                                 | C1                    | GenBank Accession No. CAB09261, DevB [Mycobacterium tuberculosis], Cole, S.T. et al., May 28, 1997  |                |
|                                 | C2                    | Peters-Wendisch, Petra G. et al, "Pyruvate carboxylase from <i>Corynebacterium glutamicum</i> : characterization, expression and inactivation of the <i>pyc</i> gene," <i>Microbiology</i> , Vol. 144:915-927 (1998)  |                |
|                                 | C3*                   | Abrams et al. Alignment to US-08-411-795B-398/C. February 1997  |                |
|                                 | C4*                   | Bathe, B. et al, "A physical and genetic map of the <i>Corynebacterium glutamicum</i> ATCC 13032 chromosome," <i>Mol. Gen. Genet.</i> , Vol. 252(3):255-265 (1996)  |                |
|                                 | C5*                   | Cole, S.T. et al, "Deciphering the biology of <i>Mycobacterium tuberculosis</i> from the complete genome sequence," <i>Nature</i> , Vol. 393(6685):537-544 (1998)   |                |
|                                 | C6*                   | Collard, F. et al, "Identification of the cDNA encoding human 6-phosphogluconolactonase, the enzyme catalyzing the second step of the pentose phosphate pathway(1)," <i>FEBS Lett.</i> , Vol. 459(2):223-226 (1999)   |                |
|                                 | C7*                   | Eikmanns, B.J. et al, "The phosphoenolpyruvate carboxylase gene of <i>Corynebacterium glutamicum</i> : Molecular cloning, nucleotide sequence, and expression," <i>Mol. Gen. Genet.</i> , Vol. 218(2):330-339 (1989)  |                |
|                                 | C8*                   | EMBL Accession No O06814 for "6-phosphogluconolactonase (EC 3.1.1.31) (6PGL)."  |                |
|                                 | C9*                   | Fleischman et al, Alignment to US-09-103-840A-2. September 2001   |                |
|                                 | C10*                  | GenBank Accession No. CAB66415, "6-phosphogluconolactonase-like protein ( <i>Arabidopsis thaliana</i> )," January 19, 2000  |                |
|                                 | C11*                  | GenBank Accession No. AL132956, "Arabidopsis thaliana DNA chromosome 3, BAC clone F2K15," January 19, 2000  |                |
|                                 | C12*                  | GenBank Accession No. CAB57866, "6 phosphogluconolactonase ( <i>Homo sapiens</i> )," October 8, 1999  |                |

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|--------------------|--|-----------------|--|
| Examiner Signature |  | Date Considered |  |
|--------------------|--|-----------------|--|

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|   |   |    |   | Examiner Name            | C. L. Fronda          |
|   |   |    |   | Attorney Docket Number   | BGI-126CPCN           |
| Sheet   | 2 | of | 2 |                          |                       |

|      |  |  |
|------|--|--|
| C13* | GenBank Accession No. HSA243972, "Homo sapiens mRNA for 6-phosphogluconolactonase (gPGL gene)," October 8, 1999  |  |
| C14* | GenBank Accession No. AF029673, "Pseudomonas aeruginosa HexR (hexR), glucose-g-phosphate1-dehydrogenase (zwf), 6-phosphogluconolactonase (pgl), and 2-keto-3deoxy-6-phosphogluconolactonase (eda) genes, complete cds," April 2, 1999                |  |
| C15* | GenBank Accession No. AAD22666, "6-phosphogluconolactonase (Pseudomonas aeruginosa)," April 2, 1999  |  |
| C16* | Krubasik et al., GenBank Accession No. NP_600792 (March, 2001) 6-phosphogluconolactonase/Glucosamine-6-phosphate isomerase/deaminase. A 235 amino acid protein from C. glutamicum  |  |
| C17* | Ma, JF et al, "Cloning and characterization of the Pseudomonas aeruginosa zwf gene encoding glucose-6-phosphate dehydrogenase, an enzyme important in resistance to methyl viologen (paraquat)," <i>J. Bacteriol.</i> , Vol. 180(7):1741-1749 (1998) |  |
| C18* | Marra et al, GenBank Accession Number AA915356 (April, 1998) vz29z08.r1 Soares thymus 2NbMT Mus musculus cDNA clone  |  |
| C19* | Peters-Wendisch, P.G. et al, "Pyruvate carboxylase as an anaplerotic enzyme in Corynebacterium glutamicum," <i>Microbiology</i> , Vol. 143:1095-1103 (1997)  |  |
| C20* | Rieger et al, Glossary of Genetics (1991), p. 16   |  |

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.

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| Examiner<br>Signature |  | Date<br>Considered |  |
|-----------------------|--|--------------------|--|